

WEB AD

Malignant gliomas are very aggressive and among the most common of brain tumors. A diagnosis carries with it a median survival of approximately 12 months, with 90-95% of patients surviving less than 2 years. The current standard treatment of surgical resection followed by radiation therapy and chemotherapy has not substantially prolonged survival and even the few treatment options shown to exhibit small increases in survival primarily benefit certain (i.e., young) patient subpopulations.

Cancer vaccines represent one novel therapy for malignant gliomas. The goal is for the body to recognize the tumor cells as foreign and produce its own response to fight off recurring tumor cells. A promising means of causing an immune response so the body can create this immunity is through the use of dendritic cell (DC) vaccines.

Dendritic cells are a small group of cells contained in everyone's white blood cell population. These cells are responsible for letting the immune system know that something foreign, like bacteria, or a tumor, is in the body. Dendritic cells help the body ward off disease by alerting the immune system.

Gliadel is an FDA-approved drug - a wafer containing a concentrated amount of a chemotherapy agent. These wafers are placed into the brain cavity after the tumor is resected (removed) and deliver a steady amount of immediate chemotherapy medicine to the surrounding brain tissue. Also, since Gliadel is a local chemotherapy, it will prevent the detrimental suppression (weakening) of the immune system shown with systemic (throughout the body) chemotherapy.

In prior Phase I and Phase II studies, patients who received chemotherapy following DC demonstrated longer progression free and overall survival than the patients who received DC or chemotherapy alone.

The purpose of this study is to determine whether after standard therapy of tumor resection surgery, along with placement of Gliadel wafers at time of surgery followed by DC vaccines will not only generate (start) an immune response, but will provide longer progression-free survival.

Patients who were screened and not enrolled in this clinical trial due to screen failure will be notified of the reason for screen failure. Pre HIV counseling and appropriate referral resources will be provided. If the screen failure is due to the positive HIV test, appropriate post HIV counseling will be provided and appropriate referrals will be made. The charts of the patients with screen failures will be destroyed. The patients' charts who will be enrolled in the study kept in the locked cabinet in the research office. Patients will be assigned a unique identifying code known only to the research team. Data will be captured by various source documents, or, as necessary, abstracted from hospital medical records by an experienced registered nurse. The electronic data for viral testing will be accessible to research personnel only.

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Inclusion criteria

- Patients must have a histopathological diagnosis of malignant glioma.
- Patients 18 years of age or older.
- Patients must have undergone maximal surgical resection of malignant glioma and placement of Gliadel wafers prior to screening,
- Both male and female of childbearing age entering the protocol must use a medically accepted form of birth control during the study, will be required to have a negative pregnancy test for female.
- Patients must have a Karnofsky performance score of at least 60% (See Appendix).
- Patients must be off steroid for at least two weeks prior to vaccination.
- Baseline hematologic and complete metabolic panel within one week of initiating therapy must fall within this range:
Hematologic: Absolute neutrophil count >1000/mm³, Platelets >60,000/mm³, Hemoglobin >8 gm/dl
Prothrombin time (PT) and activated partial thromboplastin time (PTT) no greater than 1.4x control unless therapeutically warranted.
Renal: BUN and serum creatinine <1.5 times upper limit of laboratory normal
Hepatic: Total and direct bilirubin <1.5 times upper limit of laboratory normal
AST and ALT <3 times upper limit of laboratory normal
Alkaline Phosphatase <3 times upper limit of laboratory normal.
- Patients must have good peripheral/venous access for leukopheresis.
- Patient must be capable of signing IRB approved Research Consent and Release of Medical Records form.

Exclusion Criteria

- Severe pulmonary, cardiac or other systemic disease associated with an unacceptable anesthetic or operative risk.
- The presence of an acute infection requiring active treatment will be criteria for delay or exclusion.
- Contraindication to MRI procedure unless otherwise determined by PI.
- Patients with a known history of an autoimmune disorder.
- Pregnancy.
- Patients positive for hepatitis B, hepatitis C, HIV I/II, syphilis, HTLV I/II, HCV.
- Patients with allergy to Gentamicin.
- Patient inability to participate as determined by PI discretion.

SUMMARY OF STUDY PROCEDURES

You will undergo maximal surgical resection along with placement of Gliadel wafers. We are testing to see if the Gliadel will help make the vaccine more effective in fighting your brain tumor. MRI of the brain will be performed before and after surgery to evaluate the degree of resection. After surgery, you will undergo screening procedure to determine eligibility. If eligible, you will then undergo leukapheresis to obtain dendritic cells. You will receive 3 vaccines at 2-week intervals. Each vaccine contains 50 million

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tumor lysate-pulsed dendritic cells, which will be injected intradermally in 1 ml saline in the axillary (armpit) or groin region. A registered nurse will monitor you for two hours after vaccination. Four weeks after the last vaccination, you will undergo a brain MRI and a blood test to determine whether you have produced an immune response. MRI of the brain scans will be performed every 2 months, or as clinically indicated. If the disease remains stable, you will continue to be monitored. Should the disease progress (get worse) or the tumor recurs (comes back), you will be taken off the trial and further consideration will be given to surgery and/or other appropriate treatment therapies.

We think you will be in the study for about one year.

For Further Information Please Contact:

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